

Appendix I. Prioritization Approach B Used to Identify Top Finfishes for Fishery Management Plans

Each of the following 18 questions are scored from 0-3. If an answer to a question is not known, it is given a score of one.

1. Special habitat need: Does the species depend on habitats that are especially susceptible to damage or loss at any life stage? If not, assign zero points for this criterion. If so, is that habitat subject to episodic variability (e.g. kelp habitat loss during El Niño events), long term damage (e.g. human disturbance of intertidal areas, pollution), or permanent loss (e.g. filling of bays and estuaries)? If the species has a special habitat need, but that habitat has not been altered, assign zero points. If the habitat has been altered, assign 1,2, or 3 points as specified below):

- 0** - no special need
- 1** - episodic variability (1 to 5 years)
- 2** - long term damage (over 5 years)
- 3** - permanent loss

2. Migrational vulnerability: Is the species residential or does the species aggregate in areas where it is more vulnerable to harvest? This could include spawning aggregations or returns to predictable areas.

- 0** - no special vulnerability
- 3** - vulnerability exists at some stage

Special characteristics: Does the species possess certain characteristics making it more vulnerable to over fishing?

3. Does the species experience high mortality upon capture and release?

- 0** - no
- 3** - yes

4. Does the species change sex? (i.e. removing larger, older individuals may change the sex ratio of the population)

- 0** - no
- 3** - yes

5. Does the species have a low fecundity? (less than 100 embryos per spawning event)

- 0** - no
- 3** - yes

6. Does the species mature late? (based on age at 50% maturity for females)

- 0** - 0 to 2 years
- 1** - 3 to 5 years
- 2** - 6 to 10 years
- 3** - over 10 years

7. Is the species long-lived?

- 0 - 0 to 2 years
- 1 - 3 to 10 years
- 2 - 11 to 20 years
- 3 - over 20 years

8. Distribution range: How large or small is the species' distribution?

- 1 - Pacific or Eastern Pacific
- 2 - California (northern and/or southern)
- 3 - Localized (small part of northern or southern California)

9. Recruitment potential: What type of recruitment best characterizes the species?

- 0 - strong and steady
- 1 - capable of large boom years
- 2 - moderate or not sure
- 3 - low but steady

10. Ocean conditions: Is the species susceptible to large scale (in space and time) oceanographic changes that affect primary productivity, such as warming and cooling episodes?

- 1 - little or no impact
- 2 - moderate or possible impact
- 3 - high impact

11. Changes in ex-vessel prices in commercial fishery: This criterion is defined as average ex-vessel price per pound over the past five years (1995-1999) divided by the average ex-vessel price over the past 20 years (1980-1999), expressed as a decimal fraction and adjusted for inflation.

- 0 - decrease, no change, or not taken
- 1 - increase by 1.01 to 1.20
- 2 - increase by 1.21 - 1.50
- 3 - increase by more than 1.50

Example: $\frac{\text{Adjusted ave. price 1995-99 } \$3.50}{\text{Adjusted ave. price 1980-99 } \$2.75} = 1.27 = 2 \text{ points}$

12. Sport ranking: Average rank in recreational harvest for the past twenty years, based on Recfin data (Marine Recreational Fishery Statistics Survey):

- 0 - not taken
- 1 - bottom 1/3 of ranks
- 2 - middle 1/3 of ranks
- 3 - top 1/3 of ranks

13. Increases or decreases in commercial landings: This criterion is defined as the average commercial landings over the past five years divided by the average over the past 20 years, expressed as a percent.

- 0** - no increase, no decrease, or not taken
- 1** - increase to 101 - 120%, or decrease to 80 - 99%
- 2** - increase to 121 - 150%, or decrease to 50 - 79%
- 3** - increase to >150%, decrease to <50%

14. Increases or decreases in sport landings: This criterion is defined as the average sport landings over the past five years divided by the average over the past 20 years, expressed as a percent.

- 0** - no increase, no decrease, or not taken
- 1** - increase to 101 - 120%, or decrease to 80 - 99%
- 2** - increase to 121 - 150%, or decrease to 50 - 79%
- 3** - increase to >150%, decrease to <50%

15. Special commercial harvest limitations: Does the species have a commercial quota, trip limits, or zero commercial take allowed?

- 0** - no special limit
- 3** - special limit exists

16. Special sport harvest limitations: Is there a sport fishing bag limit less than the 10-fish standard single species limit?

- 0** - no special limit
- 3** - special limit exists

17. Additive take: How many fisheries actively take the species?

- 1** - single (sport or commercial)
- 2** - sport and commercial
- 3** - multiple fisheries within sport or commercial

18. What is the level of conflict among users?

- 0** - none or little
- 3** - high